UNITED
NATIONS

A

General Assembly

Distr.
LIMITED

A/CONF.164/L.32
27 July 1993
ENGLISH
ORIGINAL: RUSSIAN

UNITED NATIONS CONFERENCE ON
STRADDLING FISH STOCKS AND
HIGHLY MIGRATORY FISH STOCKS
New York, 12-30 July 1993

LETTER DATED 27 JULY 1993 FROM THE ALTERNATE CHAIRMAN OF THE DELEGATION OF THE RUSSIAN FEDERATION ADDRESSED TO THE CHAIRMAN OF THE CONFERENCE

In the consideration of measures for the conservation of straddling fish stocks in an area beyond and adjacent to the exclusive economic zone (EEZ) and for the conservation and optimum utilization of highly migratory fish stocks, there are many fundamental concepts and terms which must be interpreted identically by the specialists who concern themselves with these questions. Accordingly, a draft of relevant definitions has been prepared and is herewith submitted by the delegation of the Russian Federation to the United Nations Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks.

I have the honour to request that this document be circulated as a document of the Conference in the "L" series.

(Signed) V. K. ZILANOV
Alternate Chairman of the delegation of
the Russian Federation to the Conference

ANNEX

Proposed definition of some terms relating to the conservation of straddling fish stocks and the conservation and optimum utilization of highly migratory fish stocks

(Submitted by the delegation of the Russian Federation)

Conservation of the living resources: the range of measures aimed at the prevention of direct and indirect harm to renewable living resources; conservation measures are being worked out and applied on the basis of the following principles:

(1) Averting the danger of potentially irreversible changes in the marine ecosystem,

(2) Preventing stocks of harvested populations from falling below levels which can produce the maximum yield and ensure sustained replenishment.

Management of stocks: management in which the target is achieved without harm to the population of a given fish stock; management in which all important factors (ecological, economic, social, political) in each specific situation are given balanced consideration.

Optimum utilization of the living resources: the best system of harvesting the resources in question, given the specific conditions that prevail; the best utilization of the living resources in the light of the selected approach.

Allowable catch: the scientifically based size of possible catches of a given stock or population, depending on the criteria selected for the intensity of fishing at different periods. As a rule, the determination is made for a year or a season.

Total allowable catch: the scientifically based size of the harvest of a given stock or population in accordance with management objectives established in advance; this corresponds to the degree of fishing intensity considered optimum from the standpoint of the selected regulatory approach.

Surplus of the total allowable catch: that part of the total allowable catch which, for whatever reason, cannot be harvested by the fishing fleet of the coastal State.

Total volume of the allowable catch of stocks: the overall biomass of the total allowable catch of all harvested species in a given region (subregion).

Maximum sustainable yield: the yield corresponding to the level of maximum productiveness of the stock in stable conditions; the maximum average catch of a given stock which can be taken over the entire period of its exploitation.

Fishing practices: the fishing arrangements adopted in a given region; the apportionment of the fishing effort in a given region in terms of both space and time;

Overexploitation: exploitation of a stock to such an extent that the yearly natural increment is lower than the level of the maximum sustainable yield or than another level corresponding to the management objectives adopted for that stock.

Associated species: species of living resources harvested together with the principal commercial resource. The adverse effect of fishing operations on their stocks may be intolerable, in which case they should be conserved together with the principal species.

Dependent species: species which are interconnected by close ecological ties (for example, ties of the predator-prey nature), which determine the direct dependence of the status (strength in numbers) of one species on the status (strength in numbers) of another or other species.

Migrations: movements of a population (stock) or a part of such population through space; according to the nature and reason for such movements, a distinction is made between horizontal, vertical, seasonal, feeding, spawning and other types of migrations, as well as combinations of such migrations.

Best scientific advice available: information which is sufficiently sound and extensive to be used for the elaboration of responsible decisions on the management of living resources; information forming the basis of the latest knowledge (notions) of the status of a given species of living resources.

Straddling fish stocks: those stocks which are formed by species of marine life which reproduce and spend the greater part of their life cycle (spawning, drifting of eggs and larvae, growth of young fish, migration, etc.) within the 200-mile economic zone and which, in some cases (under the influence of climatic conditions or the need to extend their stock area because of an increase in numbers), may temporarily migrate beyond the 200-mile economic zone into adjacent areas or by species whose natural habitat area includes both the 200-mile zone of the coastal State (the larger part of the stock area) and the adjacent area (the smaller part of the stock area).

High-seas straddling stocks may be divided into two main groups:

1. Stocks which are exploited in high-seas areas adjacent to the exclusive economic zones of coastal States;

2. Stocks which are exploited in the enclave waters of enclosed and semi-enclosed seas.

Straddling fish stocks form part of a single coastal ecosystem and their conservation must be carried out in accordance with unified principles both within the 200-mile economic zone and in adjacent areas.

Highly migratory fish stocks: stocks of those pelagic species which, during their life cycle, carry out migrations on an oceanic scale and which may be harvested both within the exclusive economic zones of coastal and island States and on the high seas, at any distance from the limits of the zones.

The following three main groups of highly migratory fish stocks may be distinguished:

1. Species whose stocks are primarily exploited in the exclusive economic zones of coastal States, while the areas in which they spawn and feed may be situated both within the zones and on the high seas (yellowfin tuna, skipjack tuna, etc.).

2. Species whose stocks are primarily exploited on the high seas, which is where their main spawning and feeding areas are also situated (bigeye tuna, albacore tuna, high-seas populations of horse mackerel, etc.).

3. Species whose stocks are primarily exploited in the exclusive zones of coastal States, in which their spawning grounds are situated and through which their migration routes pass, but whose habitat area, during periods of stock expansion, double or triple in size, spreading a considerable distance into the high-seas area adjacent to the exclusive economic zone of the coastal State (saury, mackerel, etc.).

Catch quota: that share of the allowable catch, or of the total allowable catch, established for a regulatory area, which is allocated to a State, user, vessel, etc.

Nominal catch: the aggregate catch of any given species, recorded as the live weight of the harvested fish or recalculated as the total to be off-loaded. The nominal catch does not include the discarded fish not reflected in the log.

Effective catch: the nominal catch of a given species plus the estimated or actual discards.

Biomass of the spawning stock: the total weight of all the mature fish of a given species in a population.

Sustainable harvest: the total weight (number) of fish of a given species representing the net annual product of a particular population, given the same environmental conditions.

Intensity of harvest: the share of a population, based on the volume of the population at the beginning of a particular period, which is taken over the course of this period, usually computed on an annual basis.

F-maximum criterion: the fishing mortality rate for a given exploitation arrangement, at which the maximum catch level per unit of replenishment can be achieved.

F 0.1 criterion: the fishing mortality rate at which one of the possible arrangements for scaled-down fishing can be achieved; it is quantitatively determined from the abscissa of the point where the slope of the sustainable yield curve measures 10 per cent of the slope of this curve at the beginning of the coordinates.

Exploitation rate: the ratio of the number of fish caught to the number of fish dying for any reason, subject to the condition that the natural and commercial mortality rates are concurrent.

Exploitation arrangement: the distribution of mortality of harvested fish by the age profile of the fish population, calculated by type of fishing gear, fishing area and fishing season, with due account for the size of the fish and their migration routes.

Management of fisheries: system of measures to regulate fishing activities, designed to ensure a scientifically sound catch volume.

Long-term potential catch: the maximum annual harvest, by weight, which could be drawn year after year from the population of any given species under the existing environmental conditions.

Biological over-catch: the result of over-exploitation of a population, characterized by a drop in numbers of the spawning shoal below the critical level, at which point populations start to disintegrate.

Habitat area: the area through which a given species is distributed; the area inhabited by a population.

Fishing area: the area through which a given species is distributed and within which commercial fishing may take place.

Fishing effort: measure of the intensity of fishing per unit of time; depending on the specific features of the fishing operation in question, the following indicators of fishing effort are used: (a) vessel-day catch; (b) vessel-day fishing; (c) duration of fishing operations (in hours); (e) volume of water passing through the fishing gear, etc.

Fishing strategy: long-term programme for the attainment of targets by regulated fishing utilizing specific stocks on the basis of sustainable harvesting.

Responsible fishing: fishing which, while acknowledging the need to promote the availability of food stocks, takes into account the need to utilize fishing resources in a manner harmonious with the environment and promotes the use of fishing methods and gear which are designed to ensure the optimal utilization of resources without disrupting the ecosystem and which are conducive to the use of industrial methods giving the population access to fisheries products of a high quality at a reasonable price.

Management of marine living resources (population, stocks): the maintaining at a given level, or the controlled alteration of the status, of marine living resources (populations, stocks) with a view to attaining their exploitation target; as a rule, this is effected through measures to regulate fishing.